

CLAIMS

Claim 1 (Currently Amended): One or more computer readable media containing one or more operating system programs that comprise a resource browser, said one or more programs comprising computer-readable instructions for performing a process comprising:

interacting with ~~and exclusively managing other application programs, and~~
a user and an application program running under supervision of an operating system to manage computer resources, including graphically browsing different computer resource areas that contain resources managed by the operating system;

representing resources within the resource areas as icons, the resources being physically moveable to and from at least some of the resource areas by moving the icons, ~~wherein the other application programs are affected by moving the icons;~~

at least one of the resource areas being a particular type of writable resource area to which resources can be written; and

in response to the user clicking on an icon, presenting a menu where the user is able to select a staging area not currently visible to the user; and

designating at least one of the resources to be written to the writable resource area through non-graphical means by the application program, wherein the designating is transparent to the application program.

Claim 2 (Original): One or more computer readable media as recited in claim 1, the programs further comprising:

prior to interacting with the user, pre-allocating a contiguous portion of mass storage for future use when writing identified resources to the storage medium, wherein the pre-allocated portion is large enough to create a data image that is to be created on the storage medium;

prior to writing the staged resources to the storage medium, creating a data image in the pre-allocated portion of mass storage;

wherein writing the identified resources comprises writing the data image to the storage medium.

Claim 3 (Original): One or more computer readable media as recited in claim 1, the programs further comprising, upon writing the identified resources, writing additional resources not specifically designated by the user for use in conjunction with the identified resources after they are written.

Claim 4 (Original): One or more computer readable media as recited in claim 1, the programs further comprising, upon writing the identified resources:

automatically identifying a viewer program that is compatible with one or more of the identified resources;

writing the viewer program to the storage medium for use in conjunction with the identified resources after they are written.

Claim 5 (Original): One or more computer readable media as recited in claim 1, the programs further comprising altering the icons in the staging area to indicate status of the staged resources.

Claim 6 (Previously presented): One or more computer readable media as recited in claim 1, the programs further comprising altering the icons in the staging area with status overlays to indicate status of the staged resources.

Claim 7 (Original): One or more computer readable media as recited in claim 1, the programs further comprising altering the icons in the staging area with status overlays to indicate status of the staged resources, the status overlays including a staged status overlay and an in-process status overlay.

Claim 8 (Original): One or more computer readable media as recited in claim 1, the programs further comprising defining a contextually sensitive command area and displaying a delete resource command option in the contextually sensitive command area if and only if the particular type of writable resource area is rewritable.

Claim 9 (Original): One or more computer readable media as recited in claim 1, wherein designating a resource for representation in the graphical staging area creates a reference to said designated resource rather than a copy of said designated resource, the programs further comprising dereferencing said reference during writing to write a current version of the designated resource, including any changes to the designated resource subsequent to designating it and prior to writing it.

Claim 10 (Canceled)

Claim 11 (Original): One or more computer readable media as recited in claim 1, the programs further comprising:

determining whether any changes are made to the identified resources prior to writing them;

if a change is made to a particular identified resource prior to writing, creating an unchanged copy of the particular identified resource;

writing the unchanged copy to the storage medium in place of the particular identified resource, wherein the unchanged copy does not include changes to the particular identified resource subsequent to designating it and prior to writing it.

Claim 12 (Currently Amended): A method comprising:

~~exclusively managing a plurality of computer resources and application programs by an application program running under supervision of an operating system;~~

dynamically accepting designations from a computer user of the plurality of computer resources to be written to a removable storage medium; ~~and affecting the application programs; [[and]]~~

designating at least one resource of the plurality of computer resources to be written to the removable storage medium through non-graphical means by the application program, wherein the designating is transparent to the application program; and

presenting, in response to a user clicking on an icon representative of the removable storage medium, a menu where the user is able to select a staging area not currently visible to the user.

Claim 13 (Canceled)

Claim 14 (Currently Amended): A method as recited in claim 12, further comprising, in response to detecting a user attempt to remove the storage medium, automatically prompting the computer user to replace the storage medium prior to batch writing the designated resources to the storage medium.

Claim 15 (Original): A method as recited in claim 12, further comprising, upon writing the identified resources, writing additional resources not specifically designated by the user for use in conjunction with the identified resources after they are written.

Claim 16 (Original): A method as recited in claim 12, further comprising, upon writing the identified resources:

automatically identifying a viewer program that is compatible with one or more of the identified resources;

writing the viewer program to the storage medium for use in conjunction with the identified resources after they are written.

Claim 17 (Currently Amended): A graphical user interface for a computer, comprising:

an operating system that interacts with a user to exclusively manage computer resources and application programs;

the operating system having a resource browser that is responsive to user input to explore resource areas containing different types of resources and to display icons that represent the resources, at least some of the resources being physically moveable to and from the resource areas by moving their corresponding icons;

at least one of the resource areas being a staged-write resource area;
[[and]]

in response to the user clicking on an icon, presenting a menu where the user is able to select a staging area not currently visible to the user; and
designating at least one of the resources to be written to the staged-write resource area through non-graphical means by the application program, wherein the designating is transparent to the application program.

Claim 18 (Canceled)

Claim 19 (Previously presented): A graphical user interface as recited in claim 17, wherein:

the resource browser is further configured, upon writing the staged resources, to write additional resources to said writable resource that are not specifically designated by the user for use in conjunction with the staged resources after they are written.

Claim 20 (Original): A graphical user interface as recited in 17, further comprising, upon writing the staged resources:

automatically identifying a viewer program that is compatible with one or more of the staged resources;

writing the viewer program to the storage medium for use in conjunction with the staged resources after they are written.

Claim 21 (Original): A graphical user interface as recited in claim 17, wherein the resource browser alters the icons to indicate the status of the staged resources.

Claim 22 (Original): A graphical user interface as recited in claim 17, wherein:

some of the icons have status overlays corresponding to a staged status and an in-process status.

Claim 23 (Previously presented): A graphical user interface as recited in claim 17, further comprising a contextually sensitive command area, wherein the resource browser includes a delete resource command in the contextually sensitive command area if and only if the particular type of writable resource is rewritable.

Claim 24 (Original): A graphical user interface as recited in claim 17, wherein designating a resource for representation in the staged resource display area creates a reference to said designated resource rather than a copy of said designated resource, said reference being dereferenced during writing to write a

current version of the designated resource, including any changes to the designated resource subsequent to designating it and prior to writing it.

Claim 25 (Previously presented): A graphical user interface as recited in claim 17, wherein:

prior to interacting with the user, the operating system pre-allocates a contiguous portion of mass storage for future use when writing identified resources to the writable resource area, wherein the pre-allocated portion is large enough to create a data image that is to be created on the writable resource area;

prior to writing the staged resources to said writable resource, creating a data image in the pre-allocated portion of mass storage.

Claim 26 (Previously presented): A graphical user interface as recited in claim 17, wherein the operating system monitors staged resources for changes and creates an unchanged copy of any changed staged resource for subsequent writing to said writable resource in place of the changed staged resource.

Claim 27 (Currently Amended): A graphical user interface for a computer, comprising:

an operating system that interacts with a user to ~~exclusively~~ manage computer resources and application programs;

the operating system having a resource browser that is responsive to user input to explore resource areas containing different types of resources and to display icons that represent the resources, at least some of the resources being physically moveable to and from the resource areas by moving their corresponding icons;

at least one of the resource areas being a staged-write resource area;

in response to the user clicking on an icon, presenting a menu where the user is able to select a staging area not currently visible to the user;

designating at least one of the resources to be written to the staged-write resource area through non-graphical means by the application program, wherein the designating is transparent to the application program;

the resource browser being configured to display icons of stored resources that are already stored in the staged-write resource area and icons of staged resources that the user desires to be written to the staged-write resource area but that have not yet been written to said staged-write resource area;

wherein the resource browser shows different representations of the resources depending upon whether they are stored resources or staged resources; and

the resource browser being responsive to a user action to initiate a batch write of the staged resources to the staged-write resource area.

Claim 28 (Original): A graphical user interface as recited in claim 27, wherein the user action comprises attempting to remove a storage medium corresponding to the staged-write resource area.

Claim 29 (Original): A graphical user interface as recited in claim 27, wherein:

the resource browser is further configured, upon writing the staged resources, to write additional resources not specifically designated by the user for use in conjunction with the staged resources after they are written.

Claim 30 (Original): A graphical user interface as recited in claim 27, further comprising, upon writing the staged resources:

automatically identifying a viewer program that is compatible with one or more of the staged resources;

writing the viewer program to the storage medium for use in conjunction with the staged resources after they are written.

Claim 31 (Previously presented): A graphical user interface as recited in claim 27, further comprising a contextually sensitive command menu, the menu including a delete resource command if and only if the particular type of staged-write resource area is rewritable.

Claim 32 (Original): A graphical user interface as recited in claim 27, wherein designating a resource for staging creates a reference to said designated resource rather than a copy of said designated resource, said reference being dereferenced during writing to write a current version of the designated resource, including any changes to the designated resource subsequent to designating it and prior to writing it.

Claim 33 (Previously presented): A graphical user interface as recited in claim 27, wherein:

prior to interacting with a user to manage computer resources, the operating system pre-allocates a contiguous portion of mass storage for future use, wherein the pre-allocated portion is large enough to create a data image that is to be created on the staged-write resource area;

prior to writing the staged resources to the staged-write resource area, creating a data image in the pre-allocated portion of mass storage.

Claim 34 (Original): A graphical user interface as recited in claim 27, wherein:

designating a resource for staging creates a reference to said designated resource rather than a copy of said designated resource;

in response to any subsequent change to the designated resource the operating system creates an unchanged copy of the designated resource, said reference being changed to indicated the unchanged copy;

said reference being dereferenced during writing to write the designated resource or its unchanged copy.

Claim 35 (Currently Amended): One or more computer readable media containing an operating system program, the operating system program comprising:

~~exclusively managing application programs;~~

accepting designations of different resources managed by the operating system by a user for staging prior to writing to a removable storage medium, wherein the different resources are accessed by the application programs;

designating at least one of the resources through non-graphical means by the application program, wherein the designating is transparent to the application program;

graphically representing any resources that are already stored on the removable storage medium and any resources that are staged but not written to the removable storage medium;

detecting a user attempt to remove the removable storage media; and

in response to the user clicking on an icon, presenting a menu where the user is able to select a staging area not currently visible to the user.

Claim 36 (Original): One or more computer readable media as recited in claim 35, the program further comprising, upon writing the staged resources, writing additional resources not specifically designated by a user, for use in conjunction with the staged resources after they are written.

Claim 37 (Original): One or more computer readable media as recited in claim 35, the program further comprising altering representations of the resources to indicate the status of the staged resources.

Claim 38 (Previously presented): One or more computer readable media as recited in claim 35, the program further comprising displaying a delete resource command in a contextually sensitive command menu if and only if a particular type of writable resource area of the removable storage media is rewritable.

Claim 39 (Original): One or more computer readable media as recited in claim 35, the program further comprising:

for any staged resource that is changed prior to writing, creating an unchanged copy of the staged resource;

writing the unchanged copy in place of the changed staged resource.

Claim 40 (Original): One or more computer readable media as recited in claim 35, further comprising:

prior to accepting designations by users, pre-allocating a contiguous portion of mass storage for use when writing staged resources, wherein the pre-allocated portion is large enough to create an image of data to be written to the removable storage medium;

prior to writing the staged resources to the removable storage media, creating a write image in the pre-allocated portion of mass storage;

wherein writing the staged resources comprises writing the write image to the removable storage medium.

Claim 41 (Currently Amended): An operating system embodied on one or more computer readable media, the operating system performing actions comprising:

saving resources managed by the operating system in response to requests from application programs ~~exclusively managed by the operating system;~~

designating at least one of the resources to a staging area through non-graphical means by the application program, wherein the designating is transparent to the application program;

in response to the user clicking on an icon, presenting a menu where the user is able to select ~~[[a]]~~ the staging area not currently visible to the user; and

in response to a user initiation, writing any staged resources to the storage medium.

Claim 42 (Original): An operating system as recited in claim 41, wherein the user initiation comprises attempting to remove the storage medium.

Claim 43 (Original): An operating system as recited in claim 41, the actions further comprising, upon writing the staged resources, writing additional resources not specifically designated by a user, for use in conjunction with the staged resources after they are written.

Claim 44 (Original): An operating system as recited in claim 41, the actions further comprising:

for any staged resource that is changed prior to writing, creating an unchanged copy of the staged resource;

writing the unchanged copy in place of the changed staged resource.

Claim 45 (Original): An operating system as recited in claim 41, further comprising:

prior to receiving requests from application programs, pre-allocating a contiguous portion of mass storage for use when writing staged resources to the

storage media, wherein the pre-allocated portion is large enough to create an image of data to be written to the storage medium;

prior to writing the staged resources to the storage media, creating a write image in the pre-allocated portion of mass storage;

wherein writing the staged resources comprises writing the write image to the storage medium.

Claim 46 (Currently Amended): One or more computer readable media containing an operating system program, the operating system program comprising:

accepting designations of different resources managed by the operating system for staging prior to writing to a removable storage medium;

designating at least one of the resources to a staging area through non-graphical means by the application program, wherein the designating is transparent to the application program;

in response to the user clicking on an icon, presenting a menu where the user is able to select [[a]] the staging area not currently visible to the user[[.]];

storing corresponding references to the designated resources;

for any designated resource that is changed prior to writing, creating an unchanged copy of the staged resource and changing the corresponding reference to indicate the unchanged copy; and

in response to an instruction to write to the removable storage medium, writing any designated resources and any unchanged copies indicated by the stored references; and

~~exclusively managing application programs that affected by the accepting, presenting, storing, creating, and writing.~~

Claim 47 (Original): One or more computer readable media as recited in claim 46, the program further comprising:

prior to receiving designations of different resources, pre-allocating a contiguous portion of mass storage for use when writing staged resources to the removable storage media, wherein the pre-allocated portion is large enough to create an image of data to be written to the removable storage medium;

prior to writing the resources to the storage media, creating a write image in the pre-allocated portion of mass storage;

wherein writing the staged resources comprises writing the write image to the storage medium.

Claim 48 (Previously presented): One or more computer readable media as recited in claim 1, the programs further comprising, in response to detecting the user attempt to remove the storage medium, identifying resources represented by the icons in the staging area and writing such identified resources to the storage medium

Claim 49 (Previously presented): One or more computer readable media as recited in claim 35, the program further comprising, in response to detecting the user attempt to remove the removable storage media, writing any staged resources to the removable storage media.

Claim 50 (Previously presented): An operating system as recited in claim 41, the actions further comprising:

in response to receiving a request from an application program to save a resource on a staged-write storage medium, noting that resource as being staged without writing the resource.